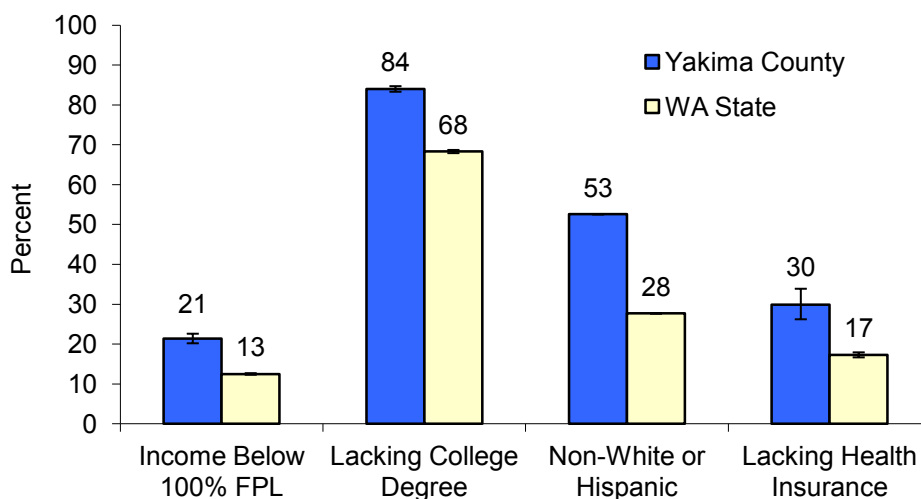


Chronic Disease Profile

Socio-demographic Risk Factors

Yakima County and Washington State Demographic Factors



In Yakima County...

- One in five households have income less than the federal poverty level.¹
- Five out of six adults age 25 and older do not have a college degree.
- Half of the population are non-white or Hispanic.
- Almost a third of under age 65 adults have no medical insurance.

Compared to Washington State...

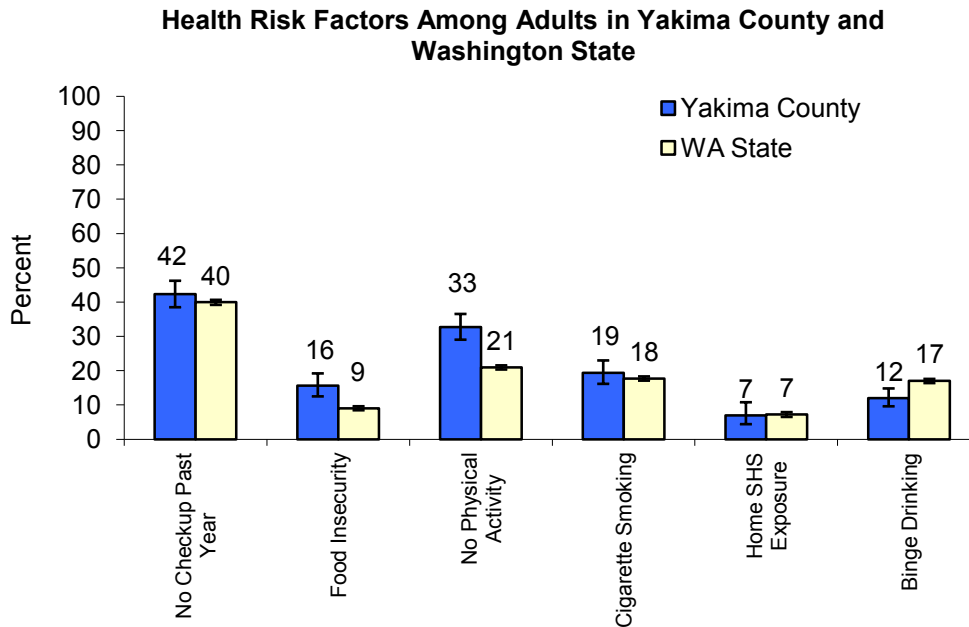
- Yakima County has more people below poverty, fewer college graduates, more non-whites or Hispanics, and more uninsured than the state average.

1. Federal Poverty Level (FPL) is determined based on household income and household size. In 2012, FPL for a family of four was \$23,050.

Error bars show the 90 percent confidence intervals around the estimate.

Data Sources: US Census Bureau, 2007-2011 American Community Survey (Income, education); WA State Office of Financial Management 2011 (race/ethnicity); 2009-2011 WA Behavioral Risk Factor Surveillance System (health insurance).

Adult Health Risk Factors



In Yakima County...

- Two out of five adults have not had a checkup in the past year.
- One in six households experience food insecurity.¹
- A third of adults do not get any physical activity
- One in five adults currently smoke cigarettes.
- One in 14 adults are exposed to secondhand smoke in the home.
- One in eight adults engage in binge drinking.

Compared to Washington State...

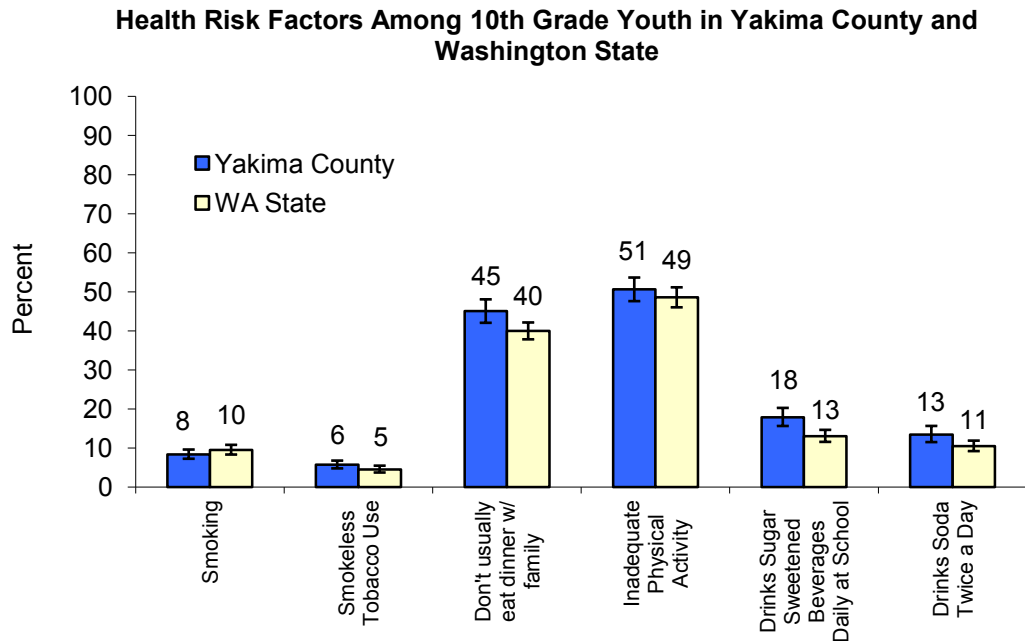
- More households in Yakima County experience food insecurity, more are physically inactive, and fewer engage in binge drinking than the state average.

1. Food Insecurity occurs when people run out of food, eat less, skip meals, or go hungry, or when they subsist on a nutrient poor diet, because they cannot afford to buy food.

Error bars show the 95 percent confidence intervals around the estimate.

Data Source: WA Behavioral Risk Factor Surveillance System, 2007 (food insecurity), 2009-2011 (checkup, smoking, second hand smoke, binge drinking) 2009&2011 (physical activity).

Youth (10th grade) Health Risk Facts



Yakima County 10th graders...

- One in 12 smoke.
- One in 16 use smokeless tobacco products.
- Almost half do not usually eat dinner with their family.
- Half do not get enough physical activity.¹
- One in five drink sugar sweetened beverages daily at school.²
- One in eight drink soda two or more times a day.

Compared to Washington State 10th graders...

- More Yakima County 10th grade students use smokeless tobacco than the state average.
- Fewer Yakima County 10th grade students eat dinner with their family, drink sugar sweetened beverages at school, and more drink soda twice a day than the state average.

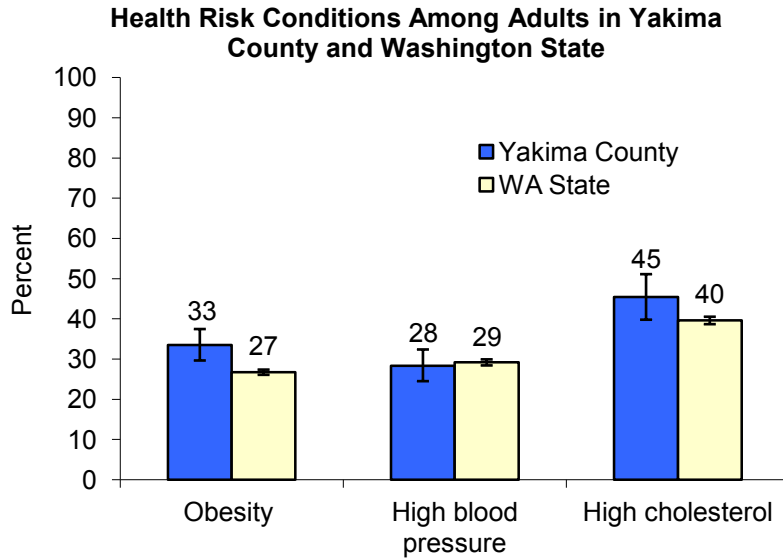
1. CDC recommends 60 minutes moderate or vigorous physical activity every day for youths.

2. Includes soda, fruit juice, sports drinks, kool-aid, etc.

Error bars show the 95percent confidence intervals around the estimate.

Data Source: WA Healthy Youth Survey, 2012.

Adult Health Risk Conditions



In Yakima County...

- A third of adults are obese.¹
- Over a fourth of adults have high blood pressure.²
- Almost half of adults have high cholesterol.²

Compared to Washington State...

- More Yakima County adults are obese and more have high cholesterol than the state average.

Obesity and overweight among youth is available from the Washington State Healthy Youth Survey at <http://www.askhys.net>.

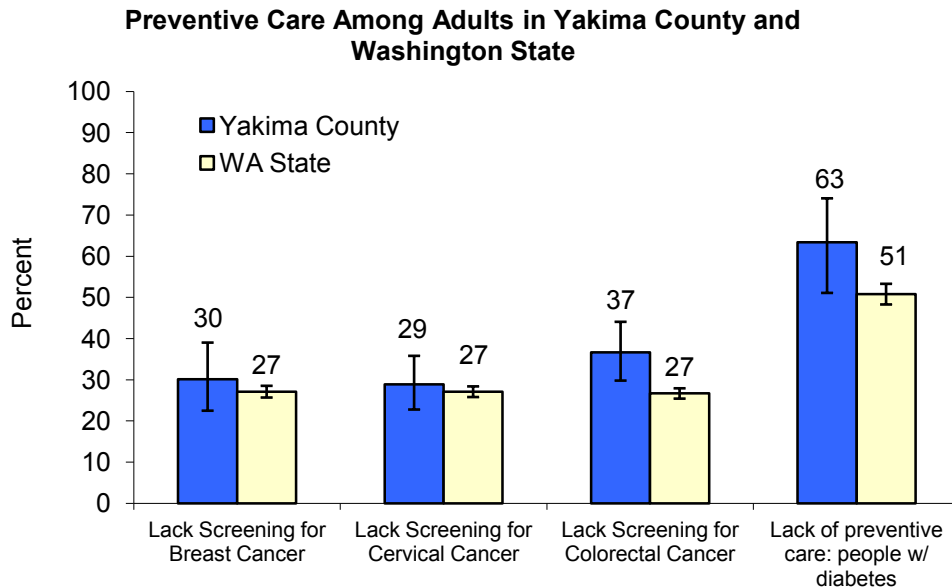
1. Obesity in adults is defined as body mass index ≥ 30 kg / m².

2. Self reported lifetime prevalence – Survey respondent answered “yes” to “have you ever been told by a health care professional that you have high blood pressure (or high cholesterol).”

Error bars show the 95percent confidence intervals around the estimate.

Data Source: WA Behavioral Risk Factor Surveillance System, 2009-2011 (Obesity), 2009&2011 (hypertension, cholesterol).

Adult Preventive Care



In Yakima County...

- Almost a third of women age 40 and over have not been screened for breast cancer.¹
- Over a fourth of women age 18 and over have not been screened for cervical cancer.¹
- Over a third of men and women age 50 and over have not been screened for colorectal cancer.¹
- Almost two thirds of adults with diabetes have not received recommended preventive care.²

Compared to Washington State...

- Fewer Yakima County men and women age 50 and over have been screened for colorectal cancer than the state average.
- Fewer Yakima County adults with diabetes receive preventive care than the state average.

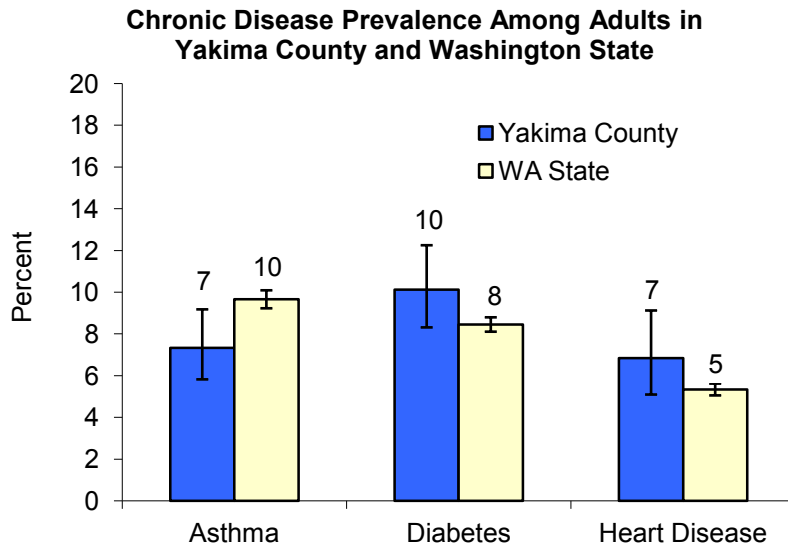
1. DOH recommends women age 40 or older should have a mammogram every two years; women age 18 or older should have a Pap test every three years; and men and women age 50 or older should have had a blood stool test in the past year, sigmoidoscopy in the past 5 years or colonoscopy in the past 10 years.

2. For people with diabetes, recommended preventive care includes annual foot exam, annual eye exam, and bi-annual hemoglobin A1c test.

Error bars show the 95percent confidence intervals around the estimate.

Data Source: WA Behavioral Risk Factor Surveillance System, 2009&2011 (cancer screening) 2009-2011 (diabetes preventive care).

Adult Chronic Disease Rates



In Yakima County...

- One in 14 adults have asthma.¹
- One in 10 adults have diabetes.¹
- One in 14 adults have had a heart attack, coronary heart disease, or angina.¹

Compared to Washington State...

- Fewer Yakima County adults have asthma than the state average.

Cancer incidence rates are available from the Washington State Cancer Registry at <https://fortress.wa.gov/doh/wscr/>.

1. Self reported lifetime prevalence – Survey respondent answered “yes” to “have you ever been told by a health care professional that you have asthma (or diabetes, heart attack, coronary heart disease, or angina).”

Error bars show the 95percent confidence intervals around the estimate.

Data Source: WA Behavioral Risk Factor Surveillance System, 2009-2011 (asthma, diabetes, heart disease).

Appendix: Data Sources & Definitions

The following provides a brief description of each data system and definitions of technical terms used in this report. Data represented in this profile were obtained from a variety of sources. Analyses for this report were completed using Stata/IC 12.0. Some estimates were obtained from previously published reports.

DATA SYSTEMS:

American Community Survey

Population data were taken from U.S. Census Bureau. The primary constitutional purpose of the census is the apportionment of congressional seats. The Census Bureau also serves as a source of data about the nation's people and economy. The American Community Survey (ACS) is an annual survey of the US population race/ethnicity, education, income, employment, and other socioeconomic factors. Small area estimates at county or census tract level are produced by combining 5 years of ACS data..

- Data related to income and education was obtained from the US Census Bureau American Community Survey (ACS) 2007-2011. For more information on the ACS, go to: <http://www.census.gov>.

Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual telephone survey that provides indicators of health risk behavior, preventive practices, attitudes, health care use and access, and prevalence of selected diseases in Washington. BRFSS was first implemented in Washington State in 1987, and is supported in part by the national Centers for Disease Control and Prevention. The survey includes a sample of English or Spanish (since 2003) speaking adults age 18 years and older. Interviews are conducted in English or Spanish, by a survey firm under contract to the Department of Health (DOH), following survey administration protocols established by Centers for Disease Control and Prevention (CDC).

The data are weighted to represent all adults. The data may underestimate some health behaviors associated with populations speaking neither English nor Spanish, transient populations, institutionalized persons, and military personnel in military housing. Due to the nature of self-reported data, there may be some underestimation of risk factors that are seen as socially unacceptable.

In 2011, CDC began conducting cell phone as well as land-line phones in the BRFSS sample, and implemented new weighting methods to improve survey representativeness. In anticipation of these changes, DOH began collecting cell phone responses in 2009. All BRFSS data in this report are analyzed using the new methodology. Due to changes in methodology, BRFSS estimates given in this report cannot be compared with previous years.

- For more information on Washington State BRFSS, go to: <http://www.doh.wa.gov/DataandStatisticalReports/HealthBehaviors/BehavioralRiskFactorSurveillanceSystemBRFSS.aspx>
- For technical notes on the Washington State BRFSS, go to: <http://www.doh.wa.gov/DataandStatisticalReports/HealthBehaviors/BehavioralRiskFactorSurveillanceSystemBRFSS.aspx>
- For more information on national BRFSS, go to: <http://www.cdc.gov/brfss>.

Healthy Youth Survey Data

The Washington State Healthy Youth Survey (HYS) is a school-based survey of students in grades 6th, 8th, 10th and 12th in a random sample of public schools in Washington State. It is administered every other year during class time and contains questions about behaviors that result in unintentional and intentional injury (e.g., seat belt use, fighting and weapon carrying); physical activity and dietary behaviors (e.g., fruit and vegetable consumption); alcohol, tobacco, and other drug use; and related risk and protective factors. The survey includes items from the

CDC-sponsored Youth Risk Behavior Survey (YRBS) and Youth Tobacco Survey, the National Institute on Drug Abuse-sponsored Monitoring the Future survey, and the Social Development Research Group's Risk and Protective Factor Assessment instrument. In 2012, 33,270 students participated in the Healthy Youth Survey and contributed to the statewide results. In addition, 170,894 students participated and contributed to local level results for counties, educational service districts, school districts and school buildings.

- For more information on the HYS, go to:
<http://www.doh.wa.gov/DataandStatisticalReports/HealthBehaviors/HealthyYouthSurvey.aspx>
- For technical notes on the HYS, go to:
<http://www.doh.wa.gov/DataandStatisticalReports/HealthBehaviors/HealthyYouthSurvey/TechnicalNotes.aspx>

School-based surveys may underestimate risk behaviors associated with youth who drop out of school or do not attend school. Due to the self-reported nature of the data, certain behaviors may be under-reported.

DEFINITIONS

Hispanic Origin: Persons of Hispanic Origin used by the Census Bureau refers to “the ancestry, nationality group, lineage, or country of birth of the person or the person’s parents or ancestors before their arrival in the United States.” Persons of Hispanic Origin have their origins in a Hispanic or Spanish-speaking country such as Mexico, Cuba, Puerto Rico, or the Spanish-speaking countries of Central or South America, regardless of race. The Behavioral Risk Factor Surveillance System (BRFSS) and the Healthy Youth Survey (HYS) treats Hispanic as an ethnic group. For additional Washington State guidelines for using racial and ethnic groups in data analysis, go to: <http://www.doh.wa.gov/Portals/1/Documents/5500/RaceEthnGuidelines.pdf>.

95 Percent Confidence Intervals: Sometimes called the “margin of error.” Commonly used with survey data to account for the differences in estimates that is due to random factors or chance. Confidence intervals are typically expressed as a range between an upper and lower value. Variation due to random sampling of respondents will place prevalence estimates within the confidence interval 95 percent of the time.

Statistically Detectable: Also known as “statistically significant”. An observed difference between two populations is determined to be statically detectable (significant) if it is unlikely to have occurred randomly or by chance. If there is more than about a 5% probability that the differences we see are just due to chance, we say that there is no statistically detectable (or significant) difference. In comparing county estimates to Washington State, we only describe differences that are statistically detectable. Statistically detectable differences may or may not be large enough to be important.

Crude versus Age-adjusted Rates: Only crude rates (percentages) are presented in this report. Crude rates represent the absolute burden in a single population at a particular time. Crude rates are recommended when a summary measure is needed and it is not necessary or desirable to adjust for other factors. In other contexts, you may find percentages that are age-adjusted. Age adjustment is used to control for the effects of age differences when making comparisons by sociodemographic factors such as income.

Insufficient Data: In our reporting of data we suppressed rates and frequencies that fell below certain criteria to protect confidentiality of individuals, and reduce problems with data reliability. If 10 or fewer respondents reported a condition, or if there were 50 or fewer total respondents, we report “insufficient data.”